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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,653	04/04/2006	Richard Kulak	60469254OT5282	7623

64779 7590 08/21/2007  
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EXAMINER
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KRUER, STEFAN

ART UNIT	PAPER NUMBER
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3654

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/574,653	Applicant(s) KULAK ET AL.	
	Examiner Stefan Krueer	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3, 5 - 10, 12 - 14 and 16 - 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5 - 10, 12 - 14 and 16 - 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 3, 5 – 9, 10, 12 – 14 and 16 - 18** are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita (5,289,902, US Patent of JP Application No. 3-282876, Patent JP-05116869).

**Re: Claims 1, 3 and 5 – 9**, Fujita discloses a roller guide device (Fig. 2) for use in an elevator system, comprising:

- A base (8),
- At least one roller (10) supported by the base such that the roller is rotatable about a roller axis (11) and moveable to the base in at least one direction perpendicular to the roller axis,
- A damper (20) that has a selectively variable stiffness and dampens the relative movement of the roller, the damper comprising a fluid (22) having a selectively variable viscosity for varying the stiffness of the damper; and
- A controller (25, Fig. 3) that automatically increases the stiffness if the damper when an associated elevator car (5) is stationary at a landing and decreases the stiffness of the damper when the associated car is moving (Col. 7, Lines 3 – 13 and Col. 8, Lines 53 – 60).
- An elevator car motion indicator (24) in communication with the controller and wherein the controller changes the damper stiffness responsive to a detected level of motion (Col. 4, Line 9).
- Wherein the damper fluid comprises a magneto-rheological fluid (Col. 3).

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- A field generator (23) that generates a field that changes a viscosity of the magneto-rheological fluid (Col. 4, line 1).
- The controller (25) controls the field generator;
- An indicator (24) that provides an indication of an elevator car vibration to the controller and wherein the controller controls the damper stiffness based upon an amount of vibration.

**Re: Claims 10 and 12 – 13**, Fujita discloses:

- An elevator system (Fig. 1),
- a car frame (5a),
- At least one roller (10) supported for vertical movement with the frame, and rotatable movement as well as lateral movement relative to the frame,
- A selectively variable stiffness damper (20) that dampens the relative movement of the roller, the damper comprising a fluid (22) having a selectively variable viscosity for varying the stiffness of the damper; and
- A controller (25, Fig. 3) that automatically increases the stiffness if the damper when an associated elevator car (5) is stationary at a landing and decreases the stiffness of the damper when the associated car is moving.
- An vibration detector (24) that provides an indication of a level of car frame elevator car vibration to the controller and wherein the controller controls the damper stiffness based upon the indication of the level of car frame vibration.
- Wherein the damper fluid comprises a magneto-rheological fluid (Col. 3).

**Regarding Claims 14 and 16 - 18**, the components comprising the device of Claims 10 and 12 - 13 would necessarily have to interact in order for the device to function. It would have been obvious to perform all the method steps of claims 10 and 12 - 13 when using the device of Fujita, in a usual and expected fashion, in as much as the method claims recite no limiting steps beyond forming each of the components.

**With further respect to Claim 17**, Fujita discloses a plurality of rollers and associated dampers (Fig. 1).

### ***Response to Arguments***

Applicant's arguments as filed 28 June 2007 with respect to **Claim 1** have been fully considered but they are not persuasive.

Applicant's primary argument that the reference of Fujita does not address the damping of vibrations associated with an elevator car when at rest (at a landing) and when in motion, wherein the damping of vibrations is accommodated by the controlled change in the viscosity of a magneto-rheological fluid whereby the viscosity automatically increases when the elevator car is at rest and decreases when the elevator car is in motion, is challenged by the disclosure of Fujita as referenced above.

Fujita describes in Column 7, commencing with Line 3, the continuous measurement of vibration frequency and amplitude throughout the operation of the elevator car, whereby detected levels of high frequency, low amplitude vibration, as measured and compared to set values by a controller (comparator), results in the reduction of damping force, the latter resulting from a lowering of electrical current to an electric coil and thereby a decrease in flux strength applied to the magneto-rheological fluid (Col. 4, line 35 – 55). Conversely, the presence of low frequency, high amplitude vibration, again as measured, indicated and subsequently determined by the aforementioned comparator, yields an increase in damping force, the latter by an increase in the electrical current to an electric coil and the consequential increase in flux strength applied to magneto-rheological fluid.

The states of high frequency, low amplitude vibration and low frequency, high amplitude vibration correlate to the elevator in motion and at rest, respectively, whereby the latter state may be indicative of the horizontal movement and change in payload attributable to passengers embarking/disembarking the elevator car.

With respect to referencing subsequent embodiments of Fujita in anticipation of the claim language as pertain to controls, etc., though the subsequent embodiment(s) is unique in structure to that of the first embodiment, the controls as such are invariable.

Therefore, the amended claim language did not overcome the rejections based on the prior art of record of the previous office action.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Johnson et al (6,318,522) and Stewart et al (5,816,587) are cited for references of an apparatus and method comprising rotary and linear dampers using a magnetorheological fluid in combination with a field generator for suspension systems.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571.272.6856. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK

17 August 2007

  
**Peter M. Cuomo**  
Supervisory Patent Examiner  
Technology Center 3600